

## **NEW ENERGY INDUSTRY TASK FORCE MEETING**

**WEDNESDAY, DECEMBER 21, 2011  
11:00 A.M.**

State Capitol – The Guinn Room  
101 N. Carson Street  
Carson City, Nevada 89701

The meeting was also available via video conference at the following location:

Grant Sawyer State Office Building  
555 East Washington Avenue, Suite 5100  
Las Vegas, Nevada 89101

The attached handouts were provided at the meeting:

1. Agenda
2. Executive Order 2011-18
3. NV Energy Renewable Transmission Initiative - Map
4. Summary of NEACs Transmission Plan
5. Western Electricity Coordinating Council (WECC) 10-Year Regional Transmission Plan (Executive Summary, pages 3-6).
6. Summary of the Federal Energy Regulatory Commission (FERC) Order No. 1000
7. Policy Paper on High Voltage Transmission – Nevada Rural Electric Association (NREA)
8. Developing Nevada's Clean Energy Resources – Clean Energy Project (CEP)

**BRIAN SANDOVAL**  
Governor

**STATE OF NEVADA**



**STACEY CROWLEY**  
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**OFFICE OF THE GOVERNOR  
NEVADA STATE OFFICE OF ENERGY**

**NOTICE OF PUBLIC MEETING  
of the  
NEW ENERGY INDUSTRY TASK FORCE**

**December 21, 2011  
11:00 a.m.**

**CARSON CITY**

State Capitol – The Guinn Room  
101 North Carson Street  
Carson City, Nevada 89703

Also available via videoconference:

**LAS VEGAS**

Grant Sawyer State Office Building  
555 East Washington, Suite 5100  
Las Vegas, Nevada 89101

The public is invited to attend at either location.

Below is an agenda of all items scheduled to be considered. Unless otherwise stated, items may be taken out of order presented on the agenda at the discretion of the chairperson.

Reasonable efforts will be made to assist and accommodate physically handicapped persons desiring to attend the meeting. Please call Emily Nunez at (775) 687-1850 ext. 7324 in advance so that arrangements may be conveniently made.

Please notify Emily Nunez at the Nevada State Office of Energy at (775) 687-1850 ext 7324, or [enunez@energy.nv.gov](mailto:enunez@energy.nv.gov) if you would like to request a written copy of the notice sent to you at no charge.

Public comment may be limited to ten minutes per person at the discretion of the chairperson.

**AGENDA**

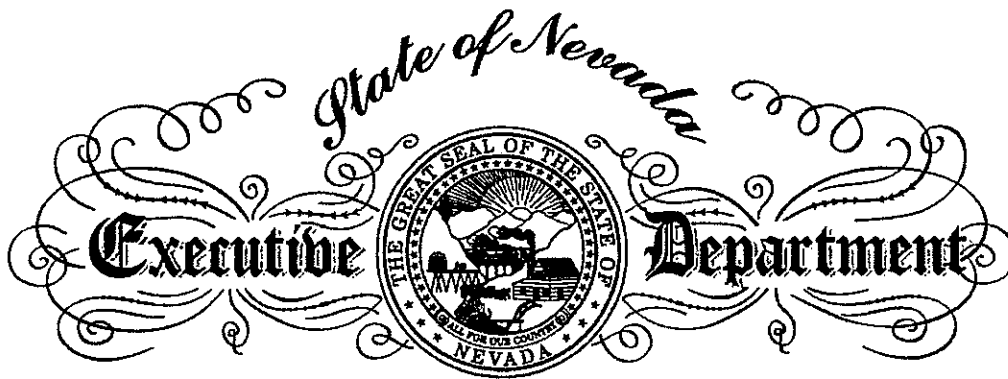
(Action may be taken on those items denoted "Action")

1. Call to Order and Roll Call. (Action)
2. Introductions – Stacey Crowley, Director of the State Office of Energy, Chair

3. Public comments and discussion. (Discussion) No action may be taken on a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action will be taken.
4. Review of NRS 701.500 and Governor Sandoval's Executive Order 2011-18.
5. Presentation of NV Energy's Renewable Transmission Initiative (RTI)
6. Presentation of the Transmission Feasibility Report by Nevada Energy Assistance Corporation (NEAC) board member Stacey Crowley.
7. Discussion and possible action on development of scope of work for business case RFP. (Action)
8. Discussion and possible action on development of schedule and goals through August 2012. (Action)
9. New business, future agenda items and announcements.
10. Set time and date of next meeting. (Action)
11. Public comments and discussion. (Discussion) No action may be taken on a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action will be taken.

This notice and agenda has been posted on or before 9:00 a.m. on the third working day before the meeting at the following locations:

- (1) Nevada State Office of Energy principal office at 755 N Roop St., Ste. 202, Carson City, NV
- (2) Nevada State Office of Energy website: <http://energy.nv.gov>
- (3) State Capitol, 101 North Carson St., Carson City, Nevada
- (4) Grant Sawyer State Office Building, 555 E Washington, Las Vegas, Nevada
- (5) State Blasdel Building: 209 E Musser Street, Carson City, Nevada
- (6) State Library and Archives: 100 North Stewart Street, Carson City, Nevada



**Executive Order 2011-18**

**PROVIDING DIRECTION TO THE NEW ENERGY INDUSTRY TASK FORCE  
AND ESTABLISHING A TECHNICAL ADVISORY COMMITTEE THERETO**

**WHEREAS**, renewable energy is important to the economy of the state and plays a role in the overall health, safety and welfare of the people of the State;

**WHEREAS**, Nevada is home to some of the most accessible renewable energy resources in the world, providing for clean, valuable electricity generation for the region;

**WHEREAS**, Nevada is a leader among the leaders in the nation to adopt policy that supports the development of our renewable resources;

**WHEREAS**, the Office of Energy plays a critical role in the development of a statewide plan for the promotion and proliferation of a sustainable and appropriate renewable energy industry;

**WHEREAS**, coordination of transmission planning and development is critical to the success of the renewable energy industry in the State;

**WHEREAS**, the State needs to be an active participant in the regional renewable energy and transmission market and planning activities that are consistent with accepted and adopted regional plans;

**WHEREAS**, the State needs to insure that the public interest is served through the creation of a competitive energy market in a manner that is reasonable and not discriminatory or preferential;

**WHEREAS**, transmission facility developers should share similar benefits and obligations commensurate with their participation in the cost allocation of transmission development that is selected for inclusion in the State and/or regional transmission plan;

**WHEREAS**, fostering greater and more timely renewable energy development requires the State to establish a more cohesive and integrated statewide strategy, including greater coordination and streamlining of the siting, permitting, and improving the manner in which the transmission infrastructure is developed; and

**WHEREAS**, Article 5, Section 1 of the Nevada Constitution provides that, "The Supreme Executive Power of this State shall be vested in a Chief Magistrate who shall be Governor of the State of Nevada."

**NOW, THEREFORE**, by the authority vested in me as Governor by the Constitution and the laws of the State of Nevada, I hereby direct and order:

1. The New Energy Industry Task Force ("Task Force"), established by NRS 701.500 as amended, is hereby charged with facilitating the timely development of transmission facilities and renewable energy resources in this State, which includes without limitation facilitation of permitting, construction, and electrical interconnection of these facilities and resources.

2. The Task Force shall work with the Director to:

- a) Identify and establish appropriate corridors for the transmission of electricity in this State recognizing Renewable Energy Zones adopted by the Public Utilities Commission pursuant to NRS 704.741(2)(b);
- b) Promote the development and regionalization of transmission facilities and renewable energy resources in this state and in the western United States in a manner that is reasonable and not discriminatory or preferential; which considers the impacts to the citizens of the state of Nevada; and which creates an environment in this state that invites the development of these facilities;
- c) Coordinate with existing electrical utilities, the Public Utilities Commission and other stakeholders on development of regional transmission planning and cost allocation strategies for interstate transmission facilities, while improving coordination for the development and construction of transmission facilities among local governments, between neighboring states and neighboring balancing authorities; and
- d) Develop the business case from the perspective of Nevadans and our neighboring states necessary to develop our State's renewable resources and related industries with lowest possible risk to ratepayers.

3. The Nevada State Office of Energy and the Public Utilities Commission of Nevada will work collaboratively, and in coordination with the Task Force, with the intent to adequately plan and coordinate issues regarding transmission of renewable energy generation within the regional energy transmission market for the benefit of the State.

4. The Director of the Office of Energy shall form a Technical Advisory Committee to assist the Task Force in its work. Members of the Advisory Committee will not have a vote in the final recommendations of the Task Force and will serve at the pleasure of the Director with the express purpose of furthering the goals and mission of the Task Force. The Director shall ensure the Technical Advisory Committee includes representation from the Public Utilities Commission, Nevada Legislature, Board of Economic Development, Nevada System of Higher Education and such federal agencies or private enterprises as the Director deems necessary.

5. On or before August 1, 2012 the Task Force will present a report to the Governor demonstrating the business case for the production and transmission of renewable energy for native and regional load requirements.

6. On or before August 1, 2012 the Task Force will present a report to the Governor that recommends policy or regulatory changes that supports the goals of the Task Force.

7. On or before August 1, 2012 the Task Force will present a report to the Governor that clearly demonstrates the direction of the State as it pertains to long term regional transmission and cost allocation planning and in compliance with the Federal Electric Regulatory Commission Order 1000.

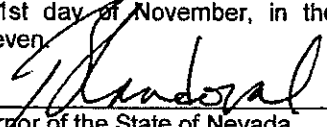
8. The Director of the Office of Energy shall coordinate efforts of the Task Force and other state, regional and federal organizations to carry out the orders as set forth in this Executive Order.

9. Meetings of the Task Force and Technical Advisory Committee shall be held in Carson City at the State Capital with members participating by video conference from the Grant Sawyer Building in Las Vegas if necessary.


10. To the extent this order conflicts with any previous executive order, this order controls.



IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Nevada to be affixed at the State Capitol in Carson City, this 21st day of November, in the year two thousand eleven.

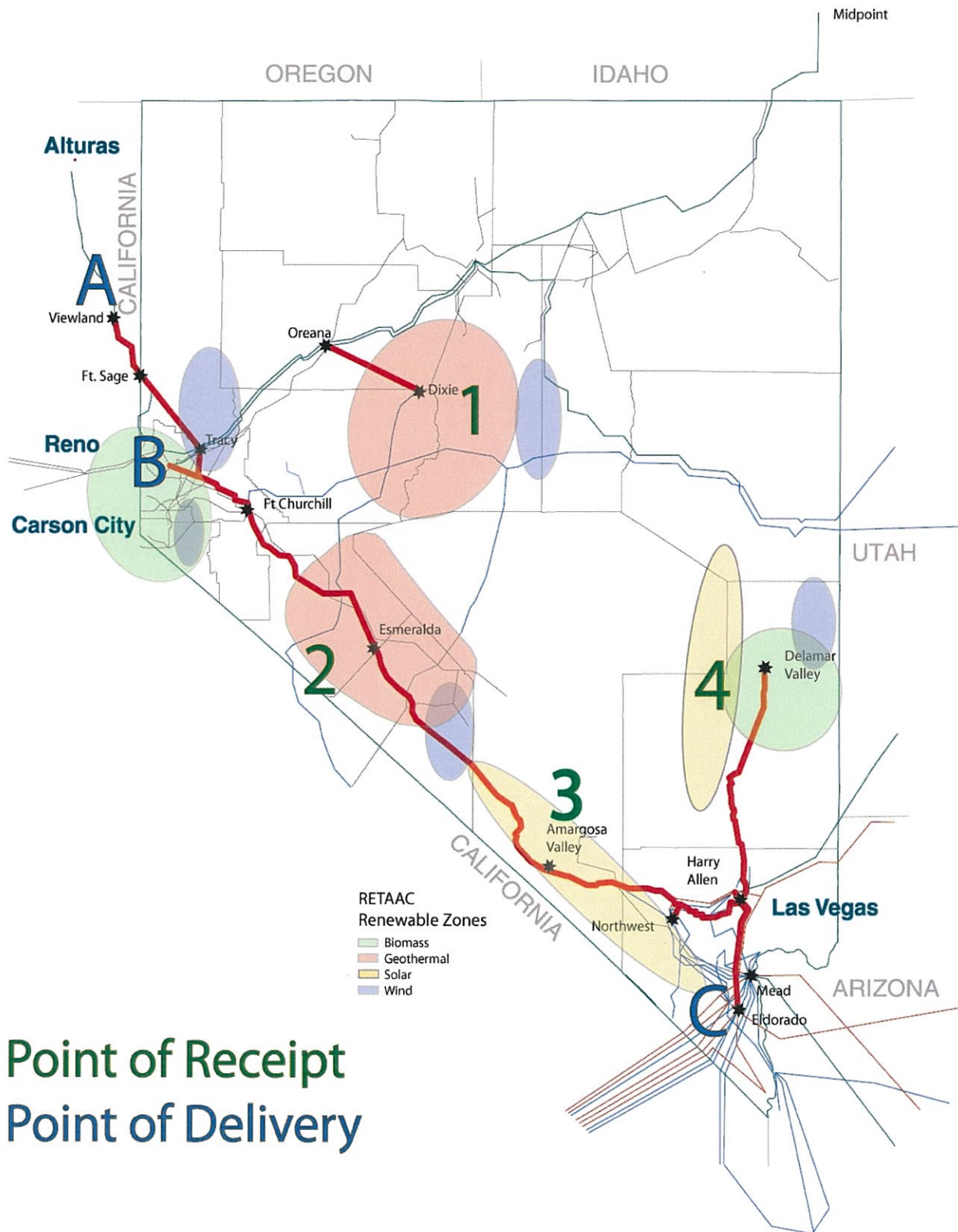
  
Governor of the State of Nevada

By the Governor:

  
Secretary of State

  
Deputy Secretary of State

# NV Energy Renewable Transmission Initiative



## **Summary of NEACs Transmission Plan**

### **Nevada State Energy Office Renewable Energy Export Transmission Routing Project**

Current Nevada electric transmission infrastructure is almost fully utilized by generators in and outside of Nevada to export or transmit resources out of and through the state. Limitations of this transmission system hinder renewable energy developers from exporting power to neighboring power purchasers. In an effort to remedy this situation, the Nevada Energy Assistance Corporation, through the Nevada State Office of Energy, utilized U.S. DOE funds to identify and site new line routes which are best situated to move renewable energy into the market. This project utilized recognized renewable energy zones and incorporated both established and proposed renewable developments into the overall export opportunity evaluation. As a result, several corridors were identified as the most viable options for export of renewable power.

Work included the detailed technical evaluation of the electrical system, identifying and mapping environmental and topographic constraints, conducting land use evaluation, completing physical line routing to avoid constraints and private lands, establishing structure spotting within the electric line route alternatives, conceptual design and line modeling, and cost estimating. This analysis ultimately resulted in an evaluation matrix for the three highest-weighted routes. The final product will be a turn-key study that is ready for submittal to the permitting authorities.



# Conceptual Renewable Energy Transmission Export Projects

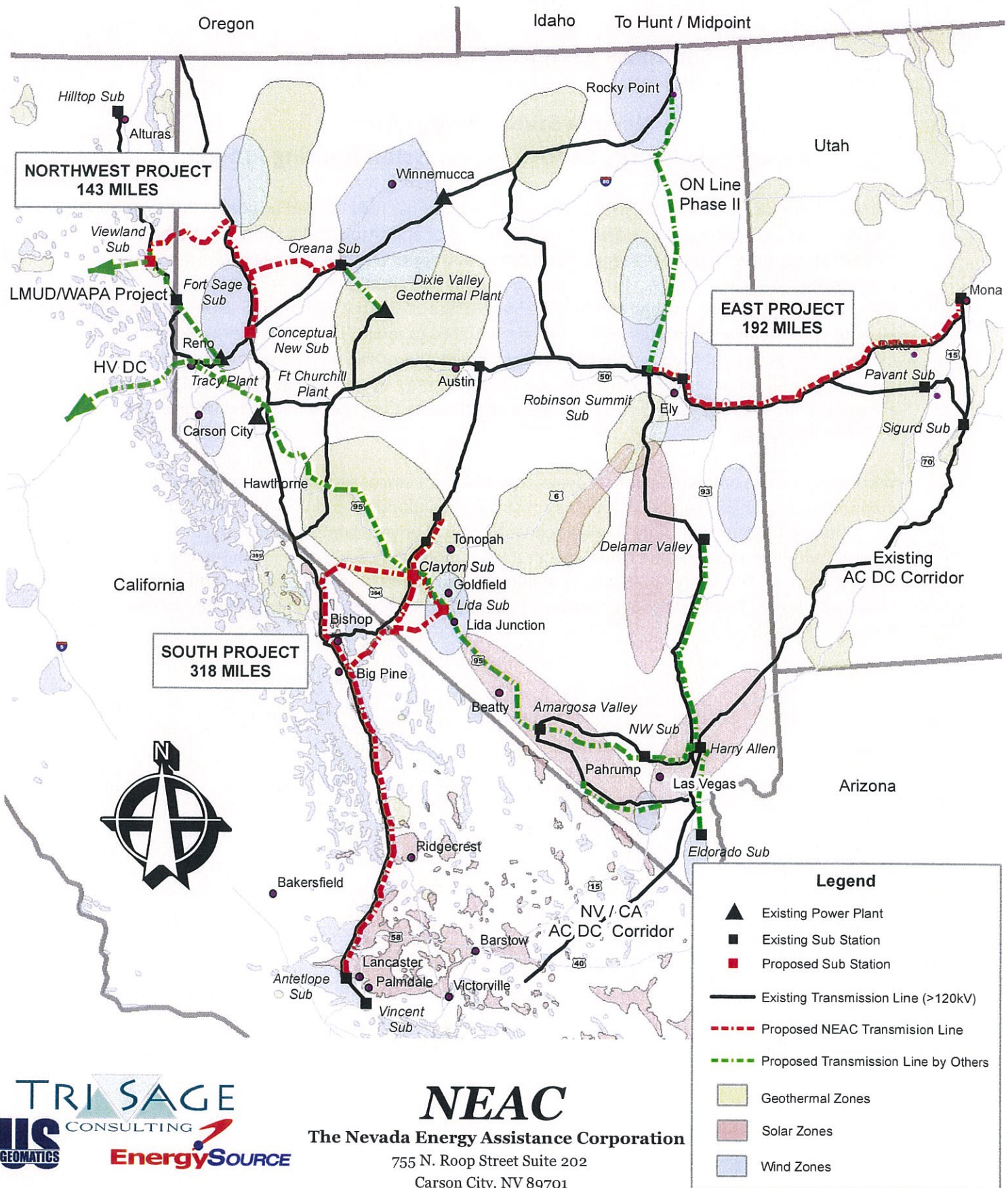


Figure 2



# 10-Year Regional Transmission Plan

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## **Plan Summary**

September 2011

## Executive Summary

The Western Electricity Coordinating Council (WECC) 10-Year Regional Transmission Plan (Plan) is an Interconnection-wide perspective on 1) expected future transmission and generation in the Western Interconnection, 2) what transmission capacity may be needed under a variety of futures, and 3) other related insights. The objective of the Plan is to provide information to stakeholders for their decision-making processes regarding where and when to build new transmission or take other related actions to help ensure the Western Interconnection is reliable, low-cost, efficient, and environmentally sound. In support of this objective, WECC's analyses are aimed toward:

- understanding transmission system needs over a broad range of potential futures;
- recognizing the potential economic benefits of transmission expansion, and;
- identifying transmission additions that, if foregone or delayed, will result in diminished opportunities to realize infrastructure benefits over a likely range of futures.

The Plan is informational in nature and is intended to advise and guide, rather than instruct. WECC does not have authority or jurisdiction over the construction of transmission lines, nor does WECC have any authority or jurisdiction over siting, permitting, or cost-allocation.

The Transmission Expansion Planning Policy Committee (TEPPC), a WECC Board of Directors (WECC Board) committee, guides the Regional Transmission Expansion Planning (RTEP) process that was used to create the Plan. RTEP is funded, in part, by a grant from the U.S. Department of Energy (DOE). The RTEP process is a bottom-up process with information flowing to TEPPC from stakeholders throughout the Western Interconnection. WECC would like to express its sincere appreciation to the many individuals and organizations that have contributed to the Plan. The volunteers who comprised the RTEP committees and workgroups have been fundamental in assuring that the best information was made available, comprehensive analysis was performed, and thorough review was conducted.

The Plan represents the continuing evolution of WECC's planning activities. This is WECC's first Interconnection-wide transmission plan and was produced using a broad stakeholder process. The Plan's limitations are based on the modeling capabilities, granularity of assumptions, and level of detail of the analyses performed.

The following are key assumptions regarding load, generation, and transmission that are germane to the observations and recommendations described in the Plan.

- The Plan assumes all 44 regionally-significant transmission projects identified in the Foundational Projects List will be completed by 2020. These projects add roughly 5,500 miles of transmission lines to the Western Interconnection.
- The Plan assumes retired and added generation will be sufficient to obtain full compliance with enacted State Renewable Portfolio Standards (RPS) and Once-Through-Cooling (OTC) regulations in California.
- The Plan assumes that enacted energy efficiency (EE) and Demand-Side Management (DSM) programs will be fully realized.

Given these assumptions, there are key regional transmission insights in the Plan.

- There are a number of regional transmission projects (further described in Section 4.1), coupled with changes to renewable generation assumptions, that have the potential to reduce the cost of meeting the RPS by accessing renewable resources that are located remote to major load centers.
- The assumed transmission additions provide sufficient transmission capacity in the Plan's Expected Future network to enable the Western Interconnection to meet its load and RPS requirements over the next 10-year planning period.<sup>1</sup>
- Two transmission paths – Montana to Northwest and the Pacific-Tie Paths – merit further evaluation for possible upgrades or expansion based on the levels of utilization and congestion that were observed in the Plan analyses. The future evaluation of these and other paths should consider impacts on reliability, system costs, economic benefits, market demand, and environmental considerations.

Expanding on these insights, the Plan includes the following observations and recommendations based on the analyses performed and stakeholder input.

**1. *Cost-effective remote renewable resources – Section 4.1***

Some long-distance transmission to access remote renewable resources appears to be cost-effective when compared to some of the local renewable generation assumed in the Plan's Expected Future. Based on the high level of analysis performed, results from the resource relocation plus transmission expansion alternatives evaluated as part of the 10-year planning studies suggest total cost savings result under the alternative resource futures when compared with generation assumed in the Expected Future case.

**2. *Montana to Northwest (Path 8) – Section 4.2***

The utilization of and congestion on the Montana to Northwest transmission path (Path 8) remain consistently high and increase under a variety of conditions (e.g., renewable generation relocation in Montana) analyzed in the 10-year planning studies. WECC recommends consideration by decision-makers for transmission upgrades or other mitigating measures that relieve congestion on Path 8 as renewable or other types of generation are expanded in Montana.

**3. *Pacific-Tie Paths (Paths 65, 66) – Section 4.3***

The utilization of and congestion on the Pacific DC Intertie (Path 65) and California-Oregon Intertie (Path 66) continue to increase under most conditions analyzed in support of the Plan. WECC recommends consideration by decision-makers for transmission upgrades or other mitigating measures that relieve congestion on Paths 65 and 66.

**4. *Operational impacts of variable generation– Section 4.4***

All of the cases analyzed in 10-year planning studies had high levels of variable generation. This caused significant and unprecedented levels of conventional generation ramping and cycling in the production cost models (PCM) used to complete the studies. WECC recommends

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<sup>1</sup> The lines listed on the Foundational Projects List do not necessarily address local reliability issues.



that future transmission and resource planning studies at all levels include a comprehensive review of variable integration issues. The review should also include an identification of how recent-related activities (e.g., energy imbalance market, intra-hour scheduling) can reduce operational impacts of variable generation.

#### ***5. Planning cooperation – Section 4.5***

WECC recommends decision-makers accept the challenges of increased regional cooperation in transmission planning and development. WECC recognizes that integrated resource planning (IRP), RPS statutes, generation procurement, and DSM policies are state- and provincial-centered. However, results presented in the Plan suggest there are opportunities for regional transmission and renewable resource development that should not be overlooked as states implement their own energy policies. Local and state jurisdictions should consider the compatibility of these opportunities with pertinent energy policies so as not to forego potential economic and environmental benefits that may accrue to their ratepayers.

#### ***6. Environmental and cultural considerations in planning processes – Section 4.6***

As part of the RTEP project, the Scenario Planning Steering Group (SPSG) Environmental Data Task Force (EDTF) conducted a case study of selected transmission projects. The task force interviewed dozens of stakeholders to further understand how environmental information might be incorporated into regional transmission planning. The EDTF created a classification of land areas describing four tiers of suitability with respect to environmental and cultural constraints and sensitivities. It also provided recommendations on how these tiers can be incorporated into future RTEP processes. The EDTF produced an environmental and cultural data catalog for use in transmission planning processes.

#### ***7. Water resource impacts on the future generation mix – Section 4.7***

The Western Governors' Association (WGA), along with the Western States Water Council and a consortium of national laboratories conducted a case study in which they compared water withdraw and consumption of various RTEP study cases. In future RTEP cycles, the WGA will provide information on water supply constraints, drought, and climate change in order to assist WECC in evaluating the impacts and options for electric generation in transmission planning activities.

#### ***8. Future regional transmission planning processes – Section 4.8***

Great strides have been made recently in regional planning processes, but opportunities to improve the RTEP process exist. TEPPC intends to make the following enhancements to the RTEP process.

- Define a common set of key questions to be answered in the next set of regional transmission plans. This will be accomplished through discussions and other forums with utilities, policy-makers, utility regulators, permitting agencies, and other key stakeholders.
- Develop a list of questions regarding proposed transmission projects to better understand the project purpose and other parameters of the stages of transmission project development, and post the information to WECC's [Transmission Project Information Portal](#).

- Expand WECC's analytic capabilities and activities to assure the future regional transmission plans continue to support stakeholders' needs.
- Encourage greater stakeholder participation in defining load, generation, and transmission assumptions used to construct regional transmission planning studies. Identify and evaluate the challenges of integrating the variable generation assumed in the Plan and identify possible options to address the challenges.

## **Summary of FERC Order No. 1000**

(Language copied from Order No. 1000)

**SUMMARY:** The Federal Energy Regulatory Commission is amending the transmission planning and cost allocation requirements established in Order No. 890 to ensure that Commission-jurisdictional services are provided at just and reasonable rates and on a basis that is just and reasonable and not unduly discriminatory or preferential. With respect to transmission planning, this Final Rule:

- (1) requires that each public utility transmission provider participate in a regional transmission planning process that produces a regional transmission plan;
- (2) requires that each public utility transmission provider amend its OATT to describe procedures that provide for the consideration of transmission needs driven by public policy requirements in the local and regional transmission planning processes;
- (3) removes from Commission-approved tariffs and agreements a federal right of first refusal for certain new transmission facilities; and
- (4) improves coordination between neighboring transmission planning regions for new Docket No. RM10-23-000 - 2 - interregional transmission facilities.

Also, this Final Rule requires that each public utility transmission provider must participate in a regional transmission planning process that has: (1) a regional cost allocation method for the cost of new transmission facilities selected in a regional transmission plan for purposes of cost allocation; and (2) an interregional cost allocation method for the cost of certain new transmission facilities that are located in two or more neighboring transmission planning regions and are jointly evaluated by the regions in the interregional transmission coordination procedures required by this Final Rule. Each cost allocation method must satisfy six cost allocation principles.

## **Policy Paper on High Voltage Transmission Nevada Rural Electric Association (NREA)**

### **Background**

Nevada's rural electric utilities are highly transmission dependent, importing most of the energy they provide to Nevada's rural communities over transmission lines they either own, or through contracts for transmission with Nevada's investor-owned utility. Because of their situation as purchasers both of power and of access to transmission over which that power is wheeled, Nevada's consumer and member owned rural electric utilities are greatly affected by transmission policy in the state of Nevada, as well as by the policies of those from whom they buy power. Nevada as a whole is served by an aging electric transmission grid that is limited in meeting the needs of a twenty-first century economy, especially in consideration of the state's goal of becoming a renewable energy exporter. Many of the existing high voltage transmission facilities that serve rural Nevada, including many of the areas that have been targeted as rich in renewable energy resources, are long and radial in nature, and in need of modernization and capital improvements. Adequate electric service and facilities, including high-voltage transmission is essential for businesses to develop and thrive in rural Nevada, it is also central to public power's mission of providing reliable, safe and affordable power to rural consumers. Two industries that are central to the recovery of our state's economy depend on this infrastructure - mining and renewable energy development. Most rural utilities in Nevada are generally not large owners of transmission; however, recently some have begun to look at, and invest in, developing transmission - either on their own or as members of larger generation and transmission coops.

### **Goals**

Nevada's Rural Electric utilities, represented by NREA, recognize both the difficulty and importance of developing and updating our state's transmission grid and stand ready to work with our elected representatives and all other interested parties to remove barriers and find solutions towards this end. We believe that the State of Nevada should strive to increase electric transmission access in rural Nevada and increase electric transmission access to the Western Area transmission grid, and that Nevada should pursue every avenue available to accomplish these goals with a balanced approach incorporating all cost-effective opportunities consistent with overall public policy. One of NREA members' highest priorities is maintaining affordable access to transmission so that we can continue to import the power we need to serve native loads in rural Nevada.

**Policy Suggestions:** Following are some possible avenues to achieve these goals that would be of benefit to and supported by the collective membership of the Nevada Rural Electric Association (NREA).

**Coordinated Transmission Planning:** Coordinate planning of transmission facilities among electric utilities, developers and public agencies operating in Nevada; this could include the creation of a transmission planning work group.

**Partnership Opportunities:** Encourage partnership opportunities for Nevada's utilities to acquire access to proposed transmission projects including partial ownership or similar access rights.

Updated December 2011



Permitting: Rural Nevada is made up of 88% Federal lands - one significant challenge to the development of transmission is permitting hurdles for all new facilities built on public lands. In consideration of this, encourage streamlined and expedited permitting processes in areas that are not deemed critical habitat. Current regulations make little distinction between major developments with potential for significant environmental impacts and minor projects. Such permitting keeps even small developments from moving forward

State and Regional Planning: Encourage cooperation with other states, regional initiatives and federal programs that advocate transmission expansion and upgrades.

# Developing Nevada's Clean Energy Resources



## Scenario 1: Business As Usual

### Renewables:

- 25% Renewables by 2025
- Of which, 25% of that can be met through EE

### Energy Efficiency:

- 6.25% by 2025

### Transmission:

- Connecting the Northern & Southern Energy Grids (ONLine)
- Additional transmission development to transport additional energy from renewables.

## Scenario 2: Export Scenario

### Renewables:

- 25% of Nevada Demand is provided by Renewables by 2025
- Additional generation for export: 3,000 GWH

### Energy Efficiency:

- Separate EERS (Energy Efficiency Resource Standard) of 10% by 2025

### Transmission:

- Additional transmission for renewable connection to grid, to load centers and to facilitate export.

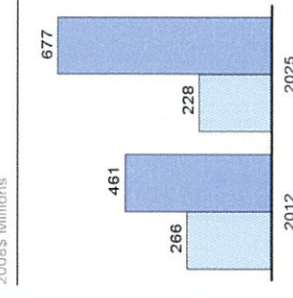
## Impact on Energy Bills

Impact on household electricity BILLS relative to no action \$/month

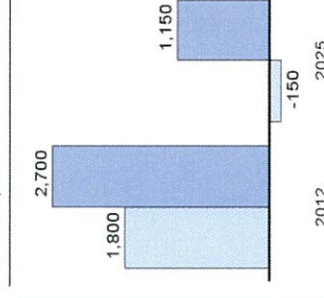


## GDP & Job Creation

Impact on GDP relative to no action 2008\$ Millions



Impact on employment relative to no action Number of jobs



*The export scenario has better outcomes than BAU, especially in 2025 when there is more clean technology investment and exported power.*

In 2008 almost 90% Of the electricity generated in Nevada was from out-of-state fuel sources. This power was produced using \$1.7 billion of imported fossil fuel: \$1.3 billion of natural gas and \$400 million of coal. In addition, Nevada imported 1.2 million MWh of electricity (\$60 million) from out-of-state generators.